SFUND RECORDS CTR

2118446

# Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

June 1, 2005

Lab/Cor

7619 6th Ave NW Seattle, WA 98117

Project Name: Air Quality Monitoring; 3/7/05 - 4/20/05

Project Number: Not Available P. O. Number: Not Available Lab/Cor Batch Number: 050737

To Whom It May Concern:

Conditions

Enclosed please find results for samples submitted to our laboratory on April 21, 2005. A list of samples received follows, with limitation or rejection criteria noted where applicable.

| Lab/Cor<br>Sample No. | Client Sample No. | Limitation/Rejection Criteria    |
|-----------------------|-------------------|----------------------------------|
| 050737-01             | -01               | No special conditions were noted |
| 050737-02             | -02               | No special conditions were noted |
| 050737-03             | -03               | No special conditions were noted |
| 050737-04             | -04 ·             | No special conditions were noted |

Method

Preparation and analysis of the above samples was conducted in accordance with the EPA method 68-02-3266 (Yamate Level 2) for the identification of asbestos. Briefly, the samples were collapsed with acetone, then etched in a low temperature plasma etcher to remove the top surface of the filter and other organics. The samples were carbon coated at high vacuum with a thin layer of carbon, placed on 200 mesh copper grids and allowed to dissolve in acetone until cleared of filter debris.

TEM analysis was performed using a Philips 410 transmission electron microscope equipped with an EDAX PV9800 X-ray analyzer. The air samples were analyzed at a screen magnification of approximately 17,621X using an accelerating voltage of 100 KV. The sizing of grid openings was performed on the microscope at a magnification of approximately 550X.

Counting Rules

| Minimum      | Minimum  | Minimum | Minimum Required       | Stopping      |
|--------------|----------|---------|------------------------|---------------|
| Aspect Ratio | Length   | Width   | Analytical Sensitivity | Rules         |
| 5:1          | 0.5 μm 、 | NA      | 0.005                  | 50 Structures |

Disclaimer

This test report relates only to the items tested in this report. Interpretation of these results is the sole responsibility of the client.

If further clarification of these results is needed, please do not hesitate to call me. Thank you for allowing the staff at Lab/Cor, Inc. the opportunity to provide you with analytical services.

Sincerely,

John Harris Laboratory Director

# A Professional Service Corporation in the Northwest

Report Number: 050737

**Client Information** 

Project Name: Air Quality Monitoring;

3/7/05 - 4/20/05

Project No.: Not Available P. O. No.: Not Available

Sample Type: Air

| T               | Tracking Information |        |  |  |  |  |  |  |  |
|-----------------|----------------------|--------|--|--|--|--|--|--|--|
| Login.          | Apr 21, 2005         | By: MP |  |  |  |  |  |  |  |
| Login:<br>Prep: | Apr 21, 2005         | By: MP |  |  |  |  |  |  |  |
| Verified:       | Apr 21, 2005         | By: MP |  |  |  |  |  |  |  |
|                 |                      |        |  |  |  |  |  |  |  |

Reviewed: Feb 21, 1996 By: JH Final Review: Jun 1, 2005 By: JH

Report Date: June 1, 2005

**Analysis Information** 

Analysis Type: Mod. EPA-II

*Reference No.*: 68 - 02 - 3266

Min. Aspect Ratio: 5:1
Min. Length: 0.5 µm

Min. Width: NA

## FINAL TABLE

## Transmission Electron Microscopy - Modified EPA-II - Air Sample Analysis

| Lab/Cor<br>Sample No. | Client<br>Sample No. | Description                  | Fiber Type                       | Concen-<br>tration<br>(s/mm²) | Concen-<br>tration<br>(struc/cc) | 95% Confidence<br>Interval<br>(struc/cc) | Struc.<br>Count | Analytical<br>Sens.<br>(struc/cc) | Volume<br>(liters) | Number<br>of Grid<br>Openings | Filter<br>Area<br>(mm²) | Area<br>Analyzed<br>(mm²) | Analyst | Analysis<br>Date |
|-----------------------|----------------------|------------------------------|----------------------------------|-------------------------------|----------------------------------|--|-----------------|-----------------------------------|--------------------|-------------------------------|-------------------------|---------------------------|---------|------------------|
| 050737-01             | 1                    | Etcher; 3/7/05 - 4/20/05     | TOTAL ASBESTOS                   | 0                             | <2.656                           | 0 - 9.801                                | 0               | 2.656                             | 1.0                | 10                            | 385                     | 0.1449                    | DW      | 6/1/05           |
| Passive Air           |                      | ,                            | ASBESTOS >= 5 µm<br>NON-ASBESTOS | 0                             | <2.656<br><2.656                 | 0 - 9.801<br>0 - 9.801                   | 0               |                                   |                    | -                             | -                       |                           |         |                  |
| 050737-02             | 2                    | Mech. Room; 3/7/05 - 4/20/05 | TOTAL ASBESTOS                   | 0                             | <2.656                           | 0 - 9.801                                | 0               | 2.656                             | 1.0                | 10                            | 385                     | 0.1449                    | DW      | 6/1/05           |
| Passive Air           | , .                  |                              | ASBESTOS >= 5 μm<br>NON-ASBESTOS | 0                             | <2.656<br><2.656                 | 0 - 9.801<br>0 - 9.801                   | 0               | •                                 | ,                  |                               |                         |                           |         |                  |
| 050737-03             | 3                    | Bulk Hood; 3/7/05 - 4/20/05  | TOTAL ASBESTOS                   | 0                             | <2.656                           | 0 - 9.801                                | 0               | 2.656                             | 1.0                | 10                            | 385                     | 0.1449                    | DW      | 6/1/05           |
| Passive Air           | -                    |                              | ASBESTOS >= 5 μm<br>NON-ASBESTOS | 0<br>13.8                     | <2.656<br>5.312                  | 0 - 9.801<br>0.643 - 19.177              | 0<br>2          |                                   |                    |                               |                         | ;                         |         |                  |
| 050737-04             | 4                    | TEM Hood; 3/7/05 - 4/20/05   | TOTAL ASBESTOS                   | 0                             | <2.656                           | 0 - 9.801                                | 0               | 2.656                             | 1.0                | 10 '                          | 385                     | 0.1449                    | · DW    | 6/1/05           |
| Passive Air           | •                    |                              | ASBESTOS >= 5 μm<br>NON-ASBESTOS | 0                             | <2.656<br><2.656                 | 0 - 9.801<br>0 - 9.801                   | 0               |                                   |                    |                               |                         |                           |         |                  |

# A Professional Service Corporation in the Northwest

Report Number: 050737

Report Date:

Jun 1, 2005

Client:

Lab/Cor

Lab/Cor Sample No.: 050737-01

Project Name:

Air Quality Monitoring; 3/7/05 - 4/20/05

Analyst:

DW

Sample No.:

Analysis Date:

Jun 1, 2005

Description:

Etcher; 3/7/05 - 4/20/05

### TEM ASBESTOS FIBER COUNT - RAW DATA

| Grid | GO  | Grid<br>Coord- | Struc-<br>ture | Ottactare | Average |       |    |    | Asbe | stos |    |    | Non-<br>Asbes- | Neg. | EDS | Elements | Comments | Confirmation |      |
|------|-----|----------------|----------------|-----------|---------|-------|----|----|------|------|----|----|----------------|------|-----|----------|----------|--------------|------|
|      | No. | inates         | No.            | Туре      | Length  | Width | Ch | Am | Ac   | An   | Tr | Cr | tos            | No.  | No. | Liumonto | Comments | Ву           | Date |
| Α    | 1   | D10            | NSD**`         |           |         |       |    |    |      |      |    |    |                |      |     |          |          |              |      |
|      | 2   | D30            | NSD            |           |         |       |    |    |      |      |    |    |                |      |     |          |          |              |      |
|      | 3   | C 40           | NSD            |           |         |       |    |    |      |      |    | ·  |                |      |     |          |          |              |      |
|      | 4   | C 31           | NSD            |           |         |       |    |    |      |      |    | •  |                |      |     |          |          |              | •    |
|      | 5   | C1             | NSD.           |           |         |       |    |    |      |      |    |    |                |      |     |          | •        |              |      |
|      | 6   | B12            | NSD            |           |         |       |    |    |      |      |    |    |                |      |     |          | •        |              |      |
|      | 7   | В3             | ŃSD            |           | ·       |       |    |    |      |      |    |    |                |      |     |          |          |              |      |
| В    | 8   | A1             | NSD            |           |         | `     |    |    |      |      |    |    |                |      |     |          |          |              |      |
|      | 9   | D 21           | NSD            |           |         |       |    |    |      |      |    |    |                |      |     |          |          |              |      |
|      | 10  | D 32           | NSD            |           |         |       |    |    |      |      |    |    | -              |      |     |          |          |              |      |
|      | 10  |                |                |           |         |       | 0  | 0  | 0    | 0    | 0  | 0  | 0              |      |     |          | . ,      |              | ,    |

\*\*NSD - No Structures Detected

05073700.TEM

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Ch – Chrysotile

Ac - Actinolite

Tr – Tremolite

Am - Amosite

An - Anthophyllite

# Lab/Cor, Inc. A Professional Service Corporation in the Northwest

Report Number: 050737

Report Date:

Jun 1, 2005

Client:

Lab/Cor

Lab/Cor Sample No.: 050737-02

Project Name:

Air Quality Monitoring; 3/7/05 - 4/20/05

Analyst:

DW

Description:

Analysis Date:

Jun 1, 2005

Sample No.:

Mech. Room; 3/7/05 - 4/20/05

## TEM ASBESTOS FIBER COUNT - RAW DATA

| Grid | GO  | Grid<br>Coord- | Struc-<br>ture | Chactare | Average |       |    |    | Asbe | estos |     |    | Non-<br>Asbes- | Neg. | EDS | Elements | Comments | Confir | nation |
|------|-----|----------------|----------------|----------|---------|-------|----|----|------|-------|-----|----|----------------|------|-----|----------|----------|--------|--------|
|      | No. | inates         | No.            | Туре     | Length  | Width | Ch | Am | Ac   | An    | Tr. | Cr | tos            | No.  | No. | ;        |          | Ву     | Date   |
| Α    | 1   | A 42           | NSD**          |          |         |       |    |    |      |       |     |    |                |      |     |          |          |        |        |
|      | 2   | A22            | NSD            | ,        |         |       |    |    |      |       | ·   |    |                |      |     |          |          |        |        |
|      | 3   | D2             | NSD            |          |         |       |    |    |      |       |     |    |                |      |     | •        |          |        |        |
|      | 4   | D21            | NSD            |          |         |       |    |    |      |       |     |    |                |      |     |          |          |        |        |
|      | 5   | C 30           | NSD            |          |         |       |    |    |      |       |     |    |                |      |     |          |          |        |        |
|      | 6   | C 42           | NSD            |          |         |       |    |    |      |       |     |    |                |      |     | •.       | ,        |        |        |
|      | 7   | B2.            | NSD            |          |         | ,     |    |    |      |       |     |    |                | -    |     |          |          |        |        |
| В    | 8   | B12            | NSD            |          |         |       |    |    |      |       |     |    |                |      |     |          |          |        |        |
|      | 9   | B41            | NSD            |          |         |       | Г  |    |      |       |     |    |                |      |     |          |          | . :    |        |
|      | 10  | A11            | NSD            |          |         | :     |    |    |      |       |     |    |                |      |     |          |          |        |        |
|      | 10  |                |                |          |         |       | 0  | 0  | 0    | 0     | 0   | 0  | 0              |      |     | ,        | ,        |        |        |

\*\*NSD - No Structures Detected

05073700.TEM

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Ch - Chrysotile

Ac - Actinolite

Tr - Tremolite

Am - Amosite

An - Anthophyllite

## A Professional Service Corporation in the Northwest

Report Number: 050737

Report Date:

Jun 1, 2005

Client:

Lab/Cor

Lab/Cor Sample No.: 050737-03

Project Name:

Air Quality Monitoring; 3/7/05 - 4/20/05

Analyst:

DW

Sample No.:

Analysis Date:

Jun 1, 2005

Description: Bulk Hood; 3/7/05 - 4/20/05

## TEM ASBESTOS FIBER COUNT - RAW DATA

| Grid | GO<br>No. | Grid<br>Coord- | Struc-<br>ture | Structure. | Average | Average |    |    | Asb | estos | 3  |    | Non-<br>Asbes- | Neg.  | EDS | Elements | Comments  | Confir | mation |
|------|-----------|----------------|----------------|------------|---------|---------|----|----|-----|-------|----|----|----------------|-------|-----|----------|-----------|--------|--------|
|      | NO.       | inates         | No.            | Туре       | Length  | Width   | Ch | Am | Ac  | An    | Tr | Cr | tos            | · No. | No. |          | oomments. | Ву     | Date   |
| Α    | 1         | A23            | NSD**          |            |         | •       |    |    |     |       |    |    |                |       |     |          |           |        |        |
|      | 2         | А3             | NSD            |            |         |         |    |    |     |       |    |    |                |       |     |          |           |        |        |
|      | 3         | D13            | NSD            |            |         |         |    |    |     |       |    |    |                |       |     |          |           |        |        |
|      | 4         | D32            | NSD            |            |         |         |    |    |     |       |    |    |                |       |     |          |           |        |        |
|      | 5         | D 40           | 1              | Fiber      | 10      | 1.2     |    |    |     |       |    |    | 1              |       |     | S, Ca    |           |        |        |
|      |           |                | 2              | Fiber      | 4.5     | 0.5     |    | -  |     |       |    |    | 1              |       |     | S, Ca    |           |        |        |
|      | 6         | C 31           | NSD            |            | •       |         |    |    |     |       |    |    |                |       |     |          |           |        |        |
|      | 7         | C1             | NSD            |            |         |         |    |    |     |       |    |    |                |       |     |          |           |        |        |
| В    | 8         | D2             | NSD            |            |         |         |    |    |     |       | -  |    |                |       |     | ,        | 1 .       |        |        |
|      | 9         | A21            | NSD            |            |         |         |    |    |     |       |    |    |                |       |     |          |           |        |        |
|      | 10        | A 41           | NSD            |            |         |         |    |    |     |       |    |    |                |       |     |          |           |        |        |
|      | 10        | , '            |                |            |         |         | 0  | 0  | 0   | 0     | 0  | 0  | 2              |       |     |          |           |        |        |

# A Professional Service Corporation in the Northwest

Report Number: 050737

Report Date:

Jun 1, 2005

Client:

Lab/Cor

Lab/Cor Sample No.: 050737-04

Project Name:

Air Quality Monitoring; 3/7/05 - 4/20/05

Analyst: Analysis Date: DWJun 1, 2005

Sample No.: Description:

TEM Hood; 3/7/05 - 4/20/05

## TEM ASBESTOS FIBER COUNT - RAW DATA

| Grid | GO<br>No. | Grid<br>Coord- | Struc-<br>ture | Structure | Average | Average |    |    | Asbe | stos |    |    | Non-<br>Asbes- | Neg. | EDS | Elements                              | nts Comments |    | Confirmation |  |
|------|-----------|----------------|----------------|-----------|---------|---------|----|----|------|------|----|----|----------------|------|-----|---------------------------------------|--------------|----|--------------|--|
|      | No.       | inates         | No.            | Туре      | Length  | Width   | Ch | Am | Ac   | An   | Tr | Cr |                | No.  | No. | Lientente                             | Commence     | Ву | Date         |  |
| Α    | 1         | A 42           | NSD**          |           |         |         |    |    |      |      |    |    |                |      |     |                                       |              |    |              |  |
|      | 2         | A21            | NSD            |           |         |         |    |    |      |      |    |    |                |      |     |                                       |              |    |              |  |
|      | 3         | A1             | NSD            |           |         |         |    |    |      |      |    |    |                |      |     |                                       |              |    |              |  |
|      | 4         | D10            | NSD            | •         |         |         |    |    |      |      |    |    |                |      |     |                                       |              |    |              |  |
|      | 5         | C 30           | NSD            |           |         |         |    |    |      |      |    |    | •              |      |     |                                       |              | •  |              |  |
|      | 6         | C 42           | NSD            | -         |         |         |    |    |      |      |    |    |                |      |     |                                       |              |    |              |  |
|      | 7         | C 23           | NSD            |           |         |         |    |    |      |      |    |    |                |      |     |                                       |              |    |              |  |
| В    | 8         | D1             | NSD            | ı         | •       |         |    |    | -    |      |    |    |                |      |     |                                       |              |    |              |  |
|      | 9         | A32            | NSD            |           |         |         |    |    | ·    |      |    |    |                |      |     |                                       |              |    | ٠,           |  |
|      | 10        | B 40           | NSD            |           |         |         |    |    |      |      |    |    |                |      |     |                                       |              |    |              |  |
|      | 10        |                |                |           |         |         | 0  | 0  | 0    | 0    | 0  | 0  | 0              |      |     | · · · · · · · · · · · · · · · · · · · |              |    |              |  |

\*\*NSD - No Structures Detected

05073700.TEM

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# Lab/Cor, Inc. A Professional Service Corporation in the Northwest

## **GRID MAP**

| A69               | A68                      | A67                      | A66                      | A65               | A64                      | A63               | A62                      | A61                      | A60               | B60               | B61                      | B62               | B63                      | B64               | B65                      | B66                      | B67                      | B68               | B69                      |
|-------------------|--------------------------|--------------------------|--------------------------|-------------------|--------------------------|-------------------|--------------------------|--------------------------|-------------------|-------------------|--------------------------|-------------------|--------------------------|-------------------|--------------------------|--------------------------|--------------------------|-------------------|--------------------------|
| A59               | A58                      | <b>A</b> 57              | A56                      | A55               | A54                      | A53               | A52                      | A51                      | A50               | B50               | B51                      | B52               | B53                      | B54               | B55                      | B56                      | B57                      | B58               | B59                      |
| A49               | A48                      | A47                      | A46                      | A45               | A44                      | A43               | A42                      | A41                      | A40               | B40               | B41                      | B42               | B43                      | B44               | B45                      | B46                      | B47                      | B48               | B49                      |
| A39               | A38                      | A37                      | A36                      | A35               | A34                      | A33               | A32                      | A31                      | A30               | B30               | B31                      | B32               | B33                      | B34               | B35                      | B36                      | B37                      | B38               | B39                      |
| A29               | A28                      | A27                      | A26                      | A:25              | A24                      | A23               | A22                      | A21                      | A20               | B20               | B21                      | B22               | B23                      | B24               | B25                      | B26                      | B27                      | B28               | B29                      |
| A19               | A18                      | A17                      | A16                      | A15               | A14                      | A13               | A12                      | A11                      | A10               | B10               | B11                      | B12               | B13                      | B14               | B15                      | B16                      | B17                      | B18               | B19                      |
| <b>A</b> 9        | 'A8                      | Α7                       | <b>A</b> 6               | <b>A</b> 5        | A4                       | А3                | A2                       | <b>A</b> 1               |                   |                   | B1                       | B2                | ВЗ                       | B4                | B5                       | B <u>6</u>               | B7                       | B8                | В9                       |
|                   |                          |                          |                          |                   |                          |                   |                          |                          |                   |                   |                          |                   |                          |                   |                          |                          |                          |                   |                          |
| D9                | D8                       | D7                       | D6                       | D5                | D4                       | D3                | D2                       | D1                       |                   |                   | C1                       | C2                | СЗ                       | C4                | C5                       | C6                       | C7                       | C8                | C9                       |
| D9<br>D19         |                          |                          |                          | D5<br>D15         |                          |                   | _                        |                          | D10               | C10               |                          | C2<br>C12         |                          |                   |                          |                          | <u>.</u>                 | C8                | -                        |
|                   |                          | D17                      | D16                      |                   | D14                      | D13               | D12                      | D11                      |                   |                   | C11                      | $\vdash$          | C13                      |                   | C15                      | C16                      | C17                      |                   | -                        |
| D19               | D18                      | D17                      | D16<br>D26               | D15               | D14<br>D24               | D13               | D12                      | D11                      | D20               | C20               | C11                      | C12               | C13                      | C14               | C15                      | C16                      | C17                      | C18<br>C28        | C19                      |
| D19<br>D29<br>D39 | D18<br>D28               | D17<br>D27<br>D37        | D16<br>D26<br>D36        | D15<br>D25        | D14<br>D24<br>D34        | D13<br>D23<br>D33 | D12<br>D22<br>D32        | D11<br>D21<br>D31        | D20<br>D30        | C20<br>C30        | C11<br>C21<br>C31        | C12               | C13<br>C23<br>C33        | C14<br>C24        | C15<br>C25<br>C35        | C16<br>C26<br>C36        | C17<br>C27<br>C37        | C18<br>C28        | C19<br>C29<br>C39        |
| D19<br>D29<br>D39 | D18<br>D28<br>D38<br>D48 | D17<br>D27<br>D37<br>D47 | D16<br>D26<br>D36<br>D46 | D15<br>D25<br>D35 | D14<br>D24<br>D34<br>D44 | D13<br>D23<br>D33 | D12<br>D22<br>D32<br>D42 | D11<br>D21<br>D31<br>D41 | D20<br>D30<br>D40 | C20<br>C30<br>C40 | C11<br>C21<br>C31<br>C41 | C12<br>C22<br>C32 | C13<br>C23<br>C33<br>C43 | C14<br>C24<br>C34 | C15<br>C25<br>C35<br>C45 | C16<br>C26<br>C36<br>C46 | C17<br>C27<br>C37<br>C47 | C18<br>C28<br>C38 | C19<br>C29<br>C39<br>C49 |

To be used as a reference for grid coordinates from each raw data sheet.

## A Professional Service Corporation in the Northwest

April 12, 2005

Lab\Cor 7619 6th Ave NW Seattle, WA 98117

Project Name:

Air Quality Monitoring; (6/1/04 - 3/7/05)

Project Number: Not Available
P. O. Number: Not Available
Lab/Cor Batch Number: 050429

#### **Conditions**

Enclosed please find results for samples submitted to our laboratory on March 7, 2005. A list of samples received follows, with limitation or rejection criteria noted where applicable.

| Lab/Cor<br>Sample No. | Client Sample No. | Limitation/Rejection Criteria    |                                       |   |   |
|-----------------------|-------------------|----------------------------------|---------------------------------------|---|---|
| 050429-01             | 01                | No special conditions were noted | · · · · · · · · · · · · · · · · · · · |   |   |
| 050429-02             | 02                | No special conditions were noted |                                       |   |   |
| 050429-03             | 03                | No special conditions were noted |                                       | • | • |
| 050429-04             | . 04              | No special conditions were noted |                                       |   |   |

#### Method

Preparation and analysis of the above samples was conducted in accordance with the modified EPA method 68-02-3266 (Yamate Level 2) for the identification of asbestos. Briefly, the samples were collapsed with acetone, then etched in a low temperature plasma etcher to remove the top surface of the filter and other organics. The samples were carbon coated at high vacuum with a thin layer of carbon, placed on 200 mesh copper grids and allowed to dissolve in acetone until cleared of filter debris.

TEM analysis was performed using a transmission electron microscope operated at 100KV equipped with an EDS X-ray analyzer. The air samples were analyzed at a screen magnification of approximately 18,105 X using an accelerating voltage of 100 KV. The sizing of grid openings was performed on the microscope at a magnification of approximately 550X.

#### Counting Rules

| Minimum      | Minimum | Minimum | Minimum Required       | Stopping      |
|--------------|---------|---------|------------------------|---------------|
| Aspect Ratio | Length  | Width   | Analytical Sensitivity | Rules         |
| 5:1          | 0.5 μm  | NA      | 0.005                  | 50 Structures |

### Disclaimer

This test report relates only to the items tested in this report. Interpretation of these results is the sole responsibility of the client.

If further clarification of these results is needed, please do not hesitate to call me. Thank you for allowing the staff at Lab/Cor, Inc. the opportunity to provide you with analytical services.

Sincerely.

John Harris Laboratory Director

# A Professional Service Corporation in the Northwest

Report Number: 050429

**Client Information** 

Project Name: Air Quality Monitoring

(6/1/04 - 3/7/05)

Project No.: Not Available -P. O. No.: Not Available Sample Type: Passive Air

| Tra           | cking Informa | tion             |
|---------------|---------------|------------------|
| Login:        | Mar 7, 2005   | By: MP           |
| Prep:         | Mar 7, 2005   | By: MP           |
|               | Mar 9, 2005   | MP               |
| Verified:     | Mar 7, 2005   | By: MP           |
| Reviewed:     | Feb 21, 1996  | Ву: ЛН           |
| Final Review: | Apr 12, 2005  | · <i>By</i> : JH |

Report Date: April 12, 2005

**Analysis Information** 

Analysis Type:

Modified EPA-II 68 - 02 - 3266

Reference No.:

Min. Aspect Ratio: 5:1

Min. Length:

 $0.5~\mu m$ 

Min. Width:

NA

## FINAL TABLE

## Transmission Electron Microscopy - Modified EPA-II (AHERA like)- Air Sample Analysis

| Lab/Cor<br>Sample No. | Client<br>Sample No. | Description       | Fiber Type                       | Concen-<br>tration<br>(s/mm²) | Concen-<br>tration<br>(struc/cc) | 95% Confidence<br>Interval<br>(struc/cc) | Struc.<br>Count | Analytical<br>Sens.<br>(struc/cc) | Volume<br>(liters) | Number<br>of Grid<br>Openings | Filter<br>Area<br>(mm²) | Area<br>Analyzed<br>(mm²) | Analyst | Analysis<br>Date |
|-----------------------|----------------------|-------------------|----------------------------------|-------------------------------|----------------------------------|--|-----------------|-----------------------------------|--------------------|-------------------------------|-------------------------|---------------------------|---------|------------------|
| 050429-01             | 01                   | TEM Prep Hood     | TOTAL ASBESTOS                   | 0                             | NA                               | NA                                       | 0               | NA                                | 0.0                | 10                            | 385                     | 0.1449                    | MQ      | 3/23/05          |
| Passive Air           | ,                    | (6/1/04 - 3/7/05) | ASBESTOS >= 5 µm<br>NON-ASBESTOS | 0 0                           | NA<br>NA                         | NA<br>NA                                 | 0               |                                   |                    |                               | •                       |                           |         | ·                |
| 050429-02             | 02                   | Plasma Etcher     | TOTAL ASBESTOS                   | 0                             | NA                               | NA                                       | 0               | NA                                | 0.0                | 10                            | 385                     | 0.1449                    | MQ      | 4/5/05           |
| ·<br>Passive Air      |                      | (6/1/04 - 3/7/05) | ASBESTOS >= 5 μm<br>NON-ASBESTOS | 0                             | NA<br>NA                         | NA<br>NA                                 | 0               | •                                 | ,                  | !                             |                         | ٠                         |         |                  |
| 050429-03             | 03                   | Bulk Prep Hood    | TOTAL ASBESTOS                   | 0                             | NA -                             | NA                                       | 0               | NA                                | , 0.0              | 10                            | 385                     | 0.1449                    | MQ      | 4/7/05           |
| Passive Air           |                      | (6/1/04 - 3/7/05) | ASBESTOS >= 5 μm<br>NON-ASBESTOS | 0 0                           | NA<br>NA                         | · NA<br>NA                               | 0               | •                                 | •                  |                               |                         |                           |         |                  |
| 050429-04             | 04                   | Mechanical Room   | TOTAL ASBESTOS                   | . 6.9                         | NA                               | NA                                       | 1               | NA                                | 0.0                | 10                            | 385                     | 0.1449                    | MQ      | 4/7/05           |
| Passive Air           |                      | (6/1/04 - 3/7/05) | ASBESTOS >= 5 μm<br>NON-ASBESTOS | 0                             | NA<br>NA                         | NA<br>NA                                 | 0 0             |                                   |                    |                               |                         | <u> </u>                  |         |                  |

# A Professional Service Corporation in the Northwest

Report Number: 050429

Report Date:

Apr 12, 2005

Client:

Lab\Cor

Lab/Cor Sample No.: 050429-01

Analysis Date:

Project Name:

Not Available

Analyst:

MQMar 23, 2005

Sample No.: Description:

TEM Prep Hood; (6/1/04 - 3/7/05)

## TEM ASBESTOS FIBER COUNT - RAW DATA

| Grid | GO  | Grid<br>Coord- | Struc-<br>ture | Structure | Average | Average |    |    |    | Non-<br>Asbes- | Neg. | EDS<br>No. | Elements | Comments | Confirmation |           |          |    |      |
|------|-----|----------------|----------------|-----------|---------|---------|----|----|----|----------------|------|------------|----------|----------|--------------|-----------|----------|----|------|
|      | No. | inates         | No.            | Туре      | Length  | Width   | Ch | Am | Ac | An             | Tr   | Cr         | tos      | No.      | No.          | Lioinella | Comments | Ву | Date |
| Α    | 1   | . C10          | NSD**          |           |         |         |    |    |    |                |      |            |          |          |              |           |          |    |      |
|      | 2   | C 40           | NSD            | -         |         |         |    |    |    |                |      |            |          |          |              |           |          |    |      |
|      | 3   | D21            | NSD            |           |         |         |    |    |    |                |      |            |          |          |              |           |          |    | **** |
|      | 4   | A31            | NSD            |           |         |         |    |    |    |                |      |            |          |          |              |           |          |    |      |
|      | 5   | B14            | NSD            | •         |         |         |    | Г  |    | •              |      |            | ·        |          | 7            |           |          |    |      |
| В    | 6   | B30            | NSD            |           |         |         |    |    |    |                |      |            |          |          |              |           |          |    |      |
|      | 7   | B42            | NSD            | •         |         |         |    |    |    |                |      |            |          |          |              | -         |          |    |      |
|      | 8   | B13            | NSD            | •         |         |         |    |    |    |                |      |            |          |          |              |           |          |    |      |
|      | 9   | C 41           | NSD            |           |         |         |    |    |    |                |      |            |          |          |              |           |          |    |      |
|      | 10  | D21            | NSD            |           |         |         |    |    | :  |                |      |            | ,        |          |              |           |          |    |      |
|      | 10  |                |                |           |         |         | 0  | 0  | 0  | .0             | 0    | 0          | 0        |          |              |           |          |    |      |

\*\*NSD - No Structures Detected

05042900.TEM

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Ch - Chrysotile

Ac - Actinolite

Tr - Tremolite

Am - Amosite

An - Anthophyllite

## A Professional Service Corporation in the Northwest

Report Number: 050429

Report Date:

Apr 12, 2005

Client:

Lab\Cor

Lab/Cor Sample No.: 050429-02

Project Name:

Not Available

Analyst:

Description:

Analysis Date:

MQ Apr 5, 2005

Sample No.: 02

Plasma Etcher; (6/1/04 - 3/7/05)

## TEM ASBESTOS FIBER COUNT - RAW DATA

| Grid | GO<br>No. | Grid<br>Coord- | Struc-<br>ture | Olivotajo | Average |       |    |    | Asbe | estos | )  |    | Non-<br>Asbes-<br>No. Elemer |     | Flomente | Comments  | Confirmation |    |      |
|------|-----------|----------------|----------------|-----------|---------|-------|----|----|------|-------|----|----|------------------------------|-----|----------|-----------|--------------|----|------|
|      | NO.       | inates         | No.            | Type      | Length  | Width | Ch | Am | Ac   | An    | Tr | Cr | tos                          | No. | No.      | Cioniento | Comments     | Ву | Date |
| Α    | 1         | C 40           | NSD**          |           |         |       |    |    |      |       |    |    |                              |     |          |           |              |    |      |
|      | 2         | A 40           | NSD            |           |         |       |    | Г  |      |       |    |    |                              |     | •        |           |              |    |      |
|      | 3         | A32            | NSD            |           |         |       |    |    |      |       |    |    |                              |     |          |           |              |    |      |
|      | 4         | D 41           | NSD            |           |         |       |    |    |      |       |    |    |                              | ,   |          |           |              |    |      |
|      | 5         | B10            | NSD            |           |         |       |    |    |      |       |    |    |                              |     |          |           | ·            |    | •    |
| В    | 6         | C1             | NSD            |           |         |       |    |    |      |       |    |    |                              |     |          |           |              |    | ,    |
|      | 7         | B41            | NSD            |           | ·       |       |    |    |      |       |    |    |                              |     | ·        |           |              | •  |      |
|      | 8         | B22            | NSD            |           |         |       |    |    |      |       |    |    |                              |     |          |           |              |    | ,    |
|      | 9         | B40            | NSD            |           |         |       |    |    |      |       |    |    |                              |     |          |           |              |    |      |
|      | 10        | A41            | NSD            |           |         |       |    |    |      |       |    |    |                              |     |          |           |              |    |      |
|      | 10        |                |                |           |         |       | 0  | 0  | 0    | 0     | 0  | 0  | 0                            | \   |          |           |              |    |      |

\*\*NSD - No Structures Detected

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Ch - Chrysotile

Ac - Actinolite

Tr - Tremolite

Am - Amosite

An - Anthophyllite

# A Professional Service Corporation in the Northwest

Report Number: 050429

Report Date:

Apr 12, 2005

Client:

Lab\Cor

Lab/Cor Sample No.: 050429-03

Project Name:

Not Available

Analyst:

MQ

Sample No.:

Analysis Date:

Apr 7, 2005

Description: Bulk Prep Hood; (6/1/04 - 3/7/05)

### TEM ASBESTOS FIBER COUNT - RAW DATA

| Grid | GO<br>No. | Grid<br>Coord- | Struc-<br>ture | Structure | Average |       |    |    | Asbe | stos | ł  |    | Non-<br>Asbes- | Neg. | EDS | Elements    | Comments  | Confirmation |      |
|------|-----------|----------------|----------------|-----------|---------|-------|----|----|------|------|----|----|----------------|------|-----|-------------|-----------|--------------|------|
|      | NO.       | inates         | No.            | Type      | Length  | Width | Ch | Am | Ac   | An   | Tr | Cr |                | No.  | No. | 2,0,110,110 | Communica | Ву           | Date |
| Α    | 1         | B21            | NSD**          |           |         |       | •  |    |      |      |    |    |                |      |     |             |           |              |      |
|      | 2         | B31            | NSD            |           |         |       |    |    |      |      |    |    |                |      |     |             |           |              |      |
|      | 3         | B43            | NSD            |           |         | •     |    |    |      |      |    |    |                |      |     |             |           |              |      |
|      | 4         | C10            | NSD            |           |         |       |    |    |      |      |    |    |                |      |     |             |           |              |      |
|      | 5         | A32            | NSD            |           |         |       |    |    |      |      |    |    |                |      |     |             |           |              |      |
| В    | 6         | B30            | NSD            |           |         |       |    |    |      |      |    |    |                |      |     |             | ,         |              | ·    |
|      | 7         | B42            | NSD            |           |         |       |    |    |      |      |    |    |                |      |     |             |           |              |      |
|      | 8         | B34            | NSD            |           |         |       |    |    |      |      |    |    |                |      |     |             | ·         |              |      |
|      | 9         | C 10           | NSD            |           |         |       |    |    |      |      |    |    |                |      |     |             |           |              |      |
|      | 10        | D21            | NSD            |           |         |       |    |    |      |      |    |    |                | ,    |     |             |           |              |      |
|      | 10        |                |                |           |         |       | 0  | 0  | 0    | 0    | 0  | 0  | 0              |      |     |             |           |              | ,    |

\*\*NSD - No Structures Detected

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Ch - Chrysotile

Ac - Actinolite

Tr - Tremolite

Am' - Amosite

An - Anthophyllite

# A Professional Service Corporation in the Northwest

Report Number: 050429

Report Date:

Apr 12, 2005

Client:

Lab\Cor

Lab/Cor Sample No.: 050429-04

Project Name:

Not Available

Analyst:

MQ

Description:

Analysis Date:

Apr 7, 2005

Sample No.: 04

Mechanical Room; (6/1/04 - 3/7/05)

# TEM ASBESTOS FIBER COUNT - RAW DATA

| Grid | GO  | o Coord- ture Type |       | Ottactate  | Average<br>Length                       | Average | Asbestos |    |    |    |    |    | Non-<br>Asbes- | Neg.<br>No. | EDS<br>No. | Elements   | Comments      | Confirmation |      |
|------|-----|--------------------|-------|------------|---|---------|----------|----|----|----|----|----|----------------|-------------|------------|------------|---------------|--------------|------|
| J    | No. | inates             | No.   | Type       | Length                                  | Width   | Ch       | Am | Ac | An | Tr | Cr | tos            | No.         | No.        | Liomento   | John Marketta | Ву           | Date |
| Α    | 1   | A41                | NSD** |            |   |         |          |    |    |    |    |    |                |             |            |            |               |              |      |
|      | 2   | A42                | NSD   |            | , , , , , , , , , , , , , , , , , , ,   | ,       |          |    |    |    |    |    |                |             |            | •          |               |              | ,    |
|      | 3   | D31                | NSD   |            |   |         |          |    |    |    |    |    |                |             |            |            |               |              |      |
|      | 4   | A11                | NSD   |            |   |         |          |    |    |    |    |    |                |             |            | ·          |               | . 1          |      |
|      | 5   | C 40               | NSD   |            | ,                                       |         |          |    |    |    |    |    |                |             |            |            |               |              |      |
| В    | 6   | B 41               | NSD   |            |   |         |          |    |    |    |    |    |                |             |            |            |               |              |      |
|      | 7   | C 44               | 1     | Bundle - 4 | 2                                       | 0.75    | 1        |    |    |    |    |    |                |             | 15985      | Mg, Si, Fe |               |              |      |
|      | 8   | B 44               | NSD   | •          |   |         |          |    |    |    |    |    | ,              | •           |            |            |               |              |      |
|      | 9   | B42                | NSD   | ٠.         | *************************************** |         |          |    |    |    |    |    |                |             |            |            |               |              |      |
| -    | 10  | A 40               | NSD   |            |   |         |          |    |    |    |    |    | -              |             |            |            |               |              | ·    |
|      | 10  |                    |       | ,          |   |         | 1        | 0  | 0  | 0  | 0  | 0  | 0              |             | -          |            |               | İ            |      |

\*\*NSD - No Structures Detected

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Ch - Chrysotile

Ac - Actinolite

Tr – Tremolite

Am - Amosite

An - Anthophyllite

# Lab/Cor, Inc. A Professional Service Corporation in the Northwest

# **GRID MAP**

|                   |                   |                   |                          |                          |                          |                          |                          |                          | _                 |                   |                          |                   |                          |                   |                          |                          |                   |                          |                          |
|-------------------|-------------------|-------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------|-------------------|--------------------------|-------------------|--------------------------|-------------------|--------------------------|--------------------------|-------------------|--------------------------|--------------------------|
| A69               | A68               | A67               | A66                      | A65                      | A64                      | A63                      | A62                      | A61                      | A60               | B60               | B61                      | B62               | B63                      | B64.              | B65                      | B66                      | B67               | B68                      | B69                      |
| A59               | A58               | A57               | A56                      | A55                      | A54                      | A53                      | A52                      | A51                      | A50               | B50               | B51                      | B52               | B53                      | B54               | B55                      | B56                      | B57               | B58                      | B59                      |
| A49               | A48               | A47               | A46                      | A45                      | A44                      | A43                      | A42                      | A41                      | A40               | B40               | B41                      | B42               | B43                      | B44               | B45                      | B46                      | B47               | B48                      | B49                      |
| A39               | A38               | A37               | A36                      | A35                      | A34                      | A33                      | A32                      | A31                      | A30               | B30               | B31                      | B32               | B33                      | B34               | B35                      | B36                      | B37               | B38                      | B39                      |
| A29               | A28               | A27               | A26                      | A25                      | A24                      | A23                      | A22                      | A21                      | A20               | B20               | B21                      | B22               | B23                      | B24               | B25                      | B26                      | B27               | B28                      | B29                      |
| A19               | A18               | A17               | A16                      | A15                      | A14                      | A13                      | A12                      | A11                      | A10               | B10               | B11                      | B12               | B13                      | B14               | B15                      | B16                      | B17               | B18                      | B19                      |
| <b>A</b> 9        | A8                | A7                | A6                       | <b>A</b> 5               | A4                       | А3                       | A2                       | <b>A</b> 1               |                   |                   | B1                       | B2                | ВЗ                       | B4                | B5                       | В6                       | В7                | B8                       | В9                       |
|                   |                   |                   |                          |                          |                          |                          |                          |                          |                   |                   |                          |                   |                          |                   |                          |                          |                   |                          |                          |
| D9                | D8                | D7                | D6                       | D5                       | D4                       | D3                       | D2                       | D1                       |                   |                   | C1                       | C2                | СЗ                       | C4                | C5                       | C6                       | <b>C</b> 7        | C8                       | C9                       |
| D9<br>D19         | D8<br>D18         |                   | D6<br>D16                |                          |                          |                          | -                        |                          | D10               | C10               |                          | C2<br>C12         | <b></b>                  | C4<br>C14         |                          | <del> </del>             | C7<br>C17         |                          |                          |
| -                 | <del></del>       |                   |                          | D15                      | D14                      |                          | D12                      | D11                      | D10<br>D20        |                   | C11                      | <b> </b>          | C13                      |                   | C15                      | C16                      |                   | C18                      | C19                      |
| D19               | D18               | D17               | D16<br>D26               | D15                      | D14                      | D13                      | D12                      | D11<br>D21               |                   | C20               | C11                      | C12               | C13                      | C14               | C15                      | C16<br>C26               | C17               | C18<br>C28               | C19                      |
| D19<br>D29        | D18               | D17<br>D27        | D16<br>D26<br>D36        | D15<br>D25<br>D35        | D14<br>D24<br>D34        | D13                      | D12<br>D22<br>D32        | D11<br>D21<br>D31        | D20<br>D30        | C20<br>C30        | C11<br>C21<br>C31        | C12<br>C22<br>C32 | C13<br>C23<br>C33        | C14<br>C24        | C15<br>C25<br>C35        | C16<br>C26<br>C36        | C17<br>C27<br>C37 | C18<br>C28               | C19<br>C29<br>C39        |
| D19<br>D29<br>D39 | D18<br>D28<br>D38 | D17<br>D27<br>D37 | D16<br>D26<br>D36<br>D46 | D15<br>D25<br>D35<br>D45 | D14<br>D24<br>D34<br>D44 | D13<br>D23<br>D33<br>D43 | D12<br>D22<br>D32<br>D42 | D11<br>D21<br>D31<br>D41 | D20<br>D30<br>D40 | C20<br>C30<br>C40 | C11<br>C21<br>C31<br>C41 | C12<br>C22<br>C32 | C13<br>C23<br>C33<br>C43 | C14<br>C24<br>C34 | C15<br>C25<br>C35<br>C45 | C16<br>C26<br>C36<br>C46 | C17<br>C27<br>C37 | C18<br>C28<br>C38<br>C48 | C19<br>C29<br>C39<br>C49 |

To be used as a reference for grid coordinates from each raw data sheet.